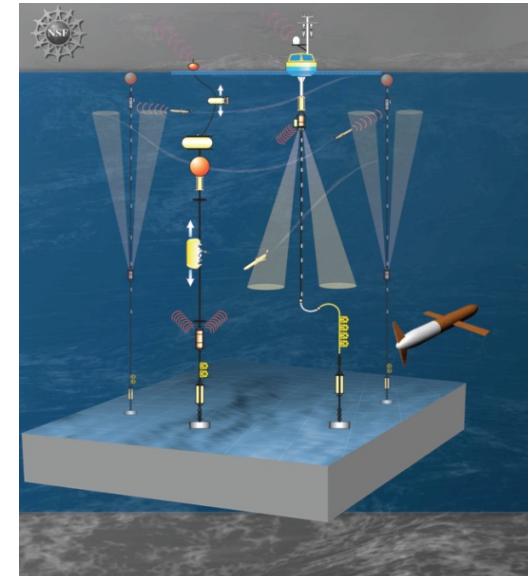
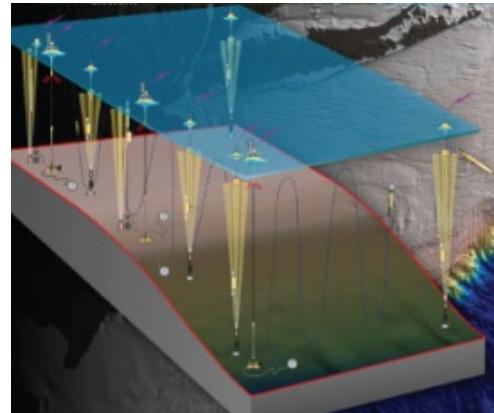
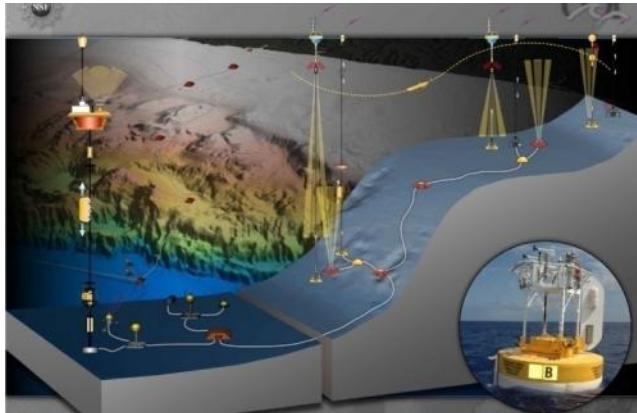


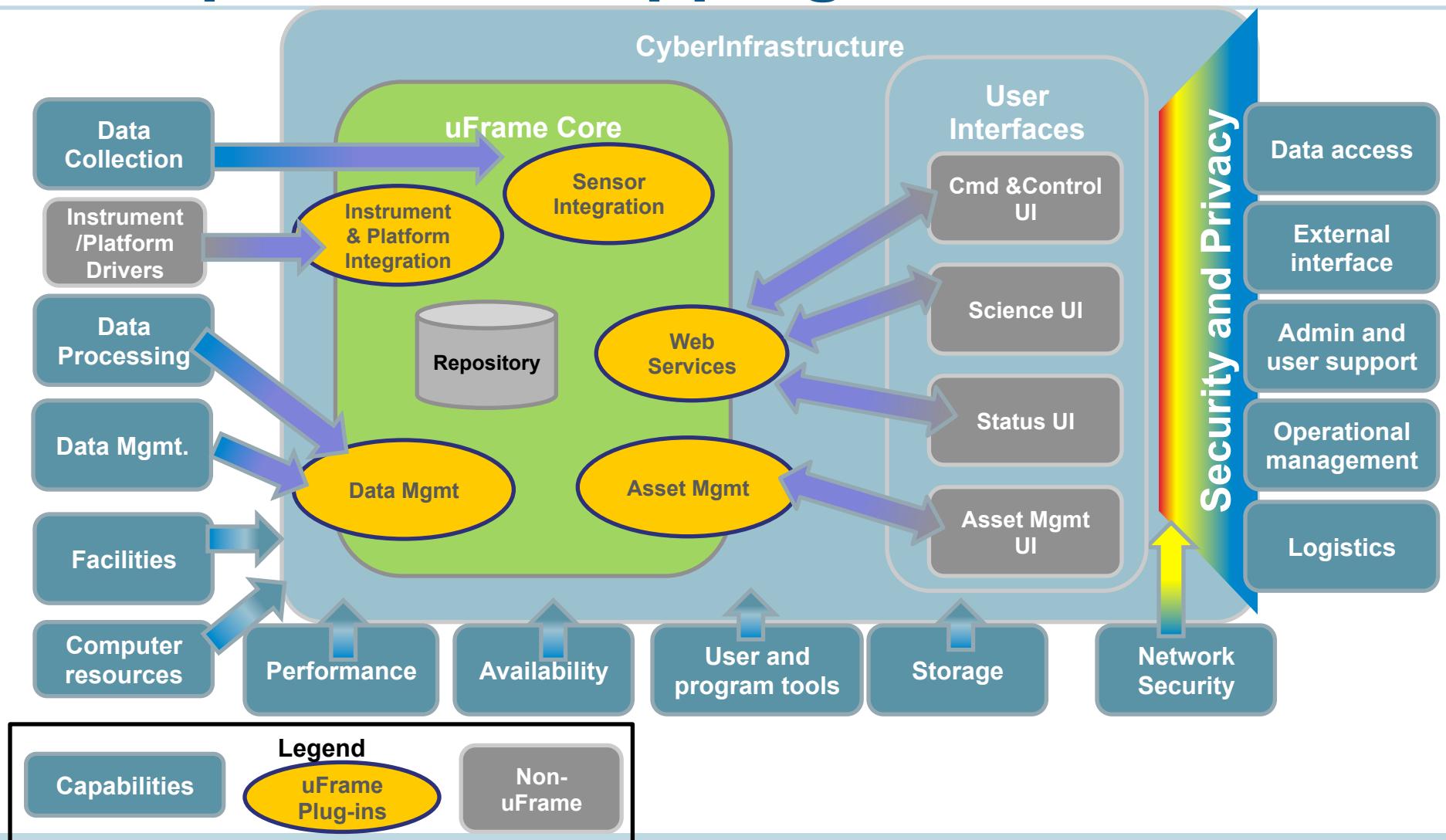


Ocean Observatories Initiative

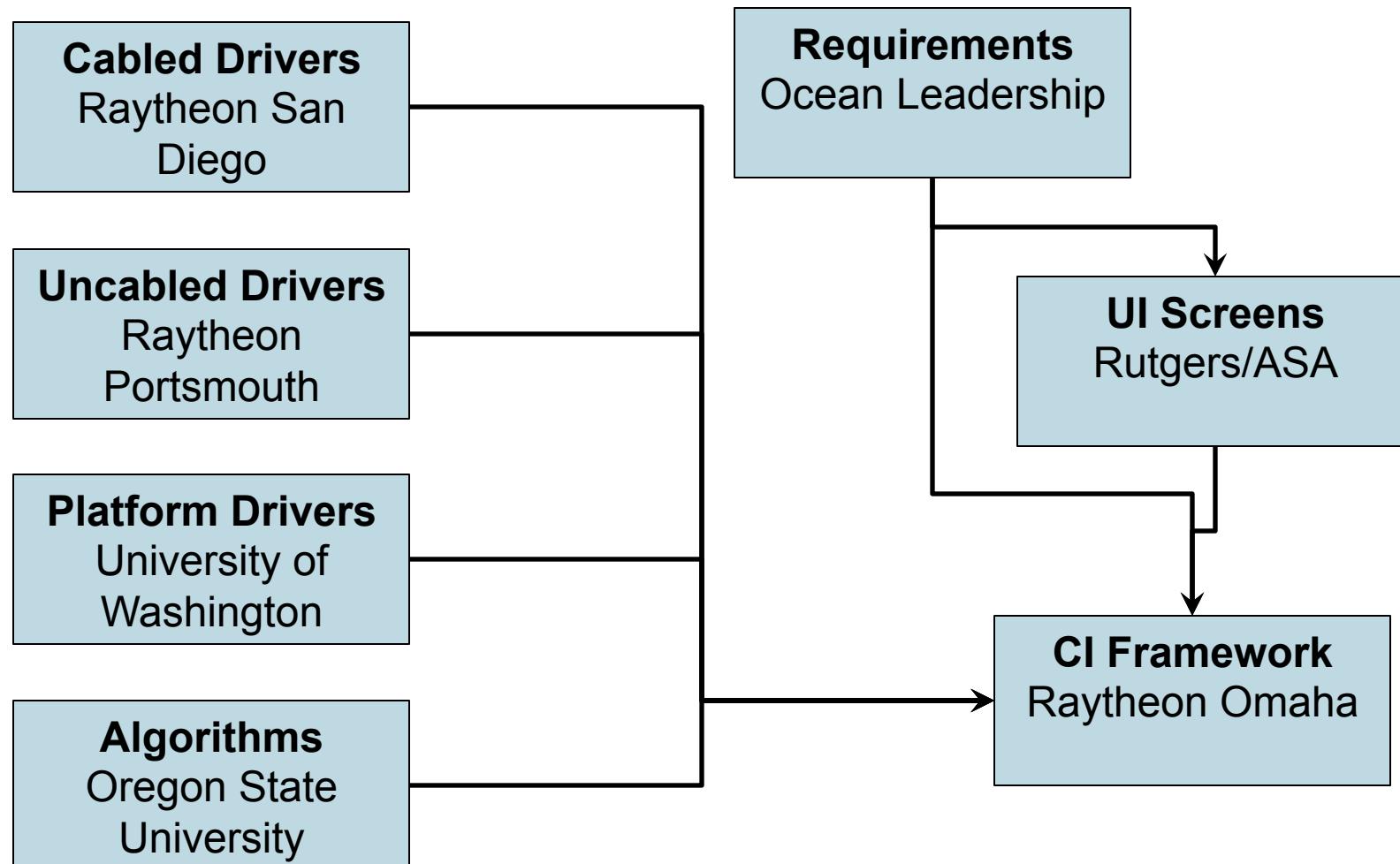
## Update on the cyberinfrastructure



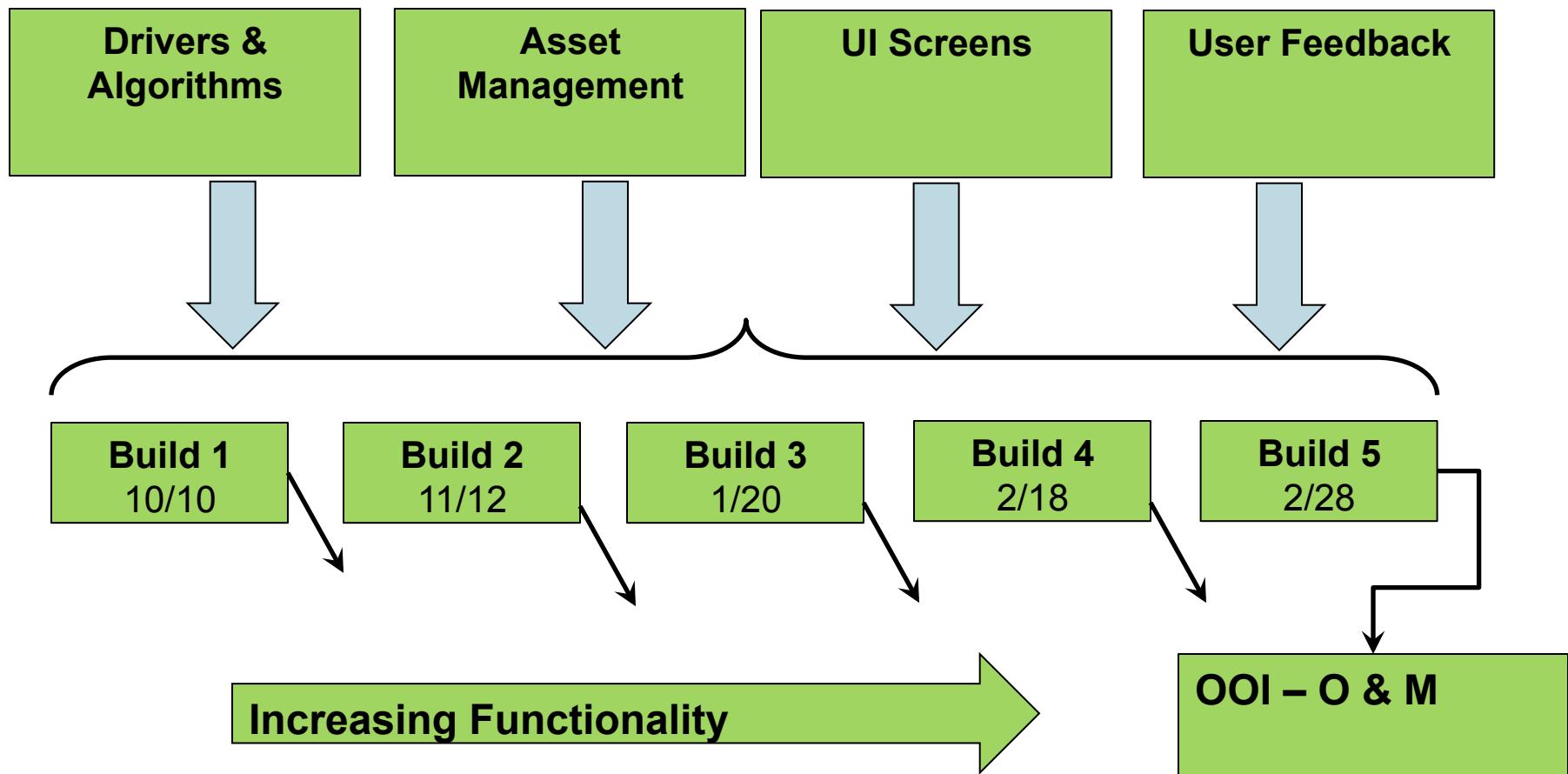
# Capabilities Mapping



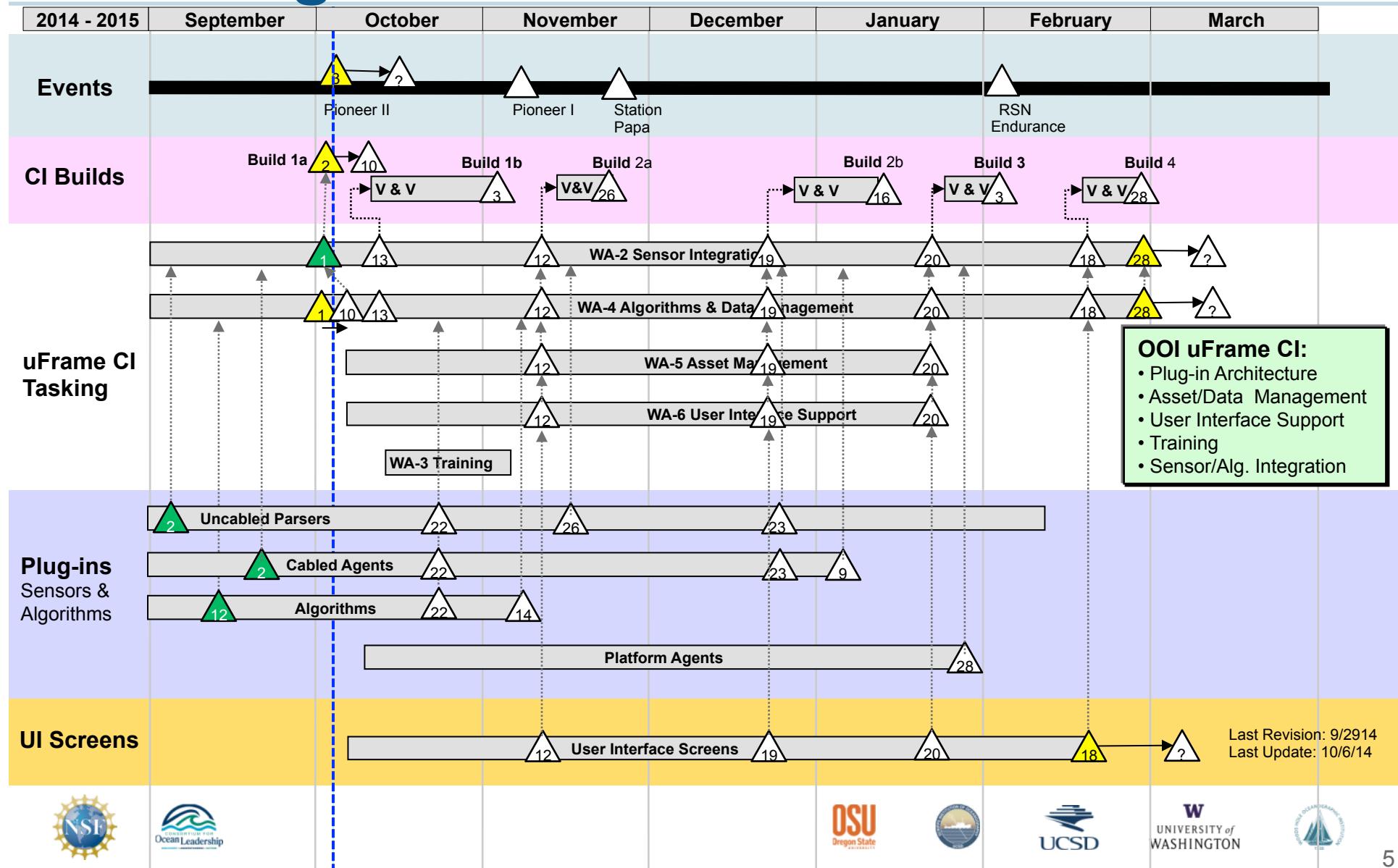
# CI Development Flow



# CI Iterative Development



# Integrated Build Plan



# User Interface Categories

- Status User Interface
  - The Status UI will rely-upon engineering, instrument, status log and asset information data that will be made-available by the uFrame system.
- Science User Interface
  - Will contain tools to perform basic analysis of the data. Some of the tools are: GIS mapping of marine assets, visualization of time-series data, trend-analysis tools.
- Asset Management User Interface
  - Front-end for the asset management database. Allows users to view and modify the data within the asset management system. Also provides APIs to allow scripted updates.
- Command and Control User Interface
  - Front-end for the monitoring of marine assets and infrastructure. Provides capability of sending commands to the OOI cabled infrastructure specific to the needs of RSN

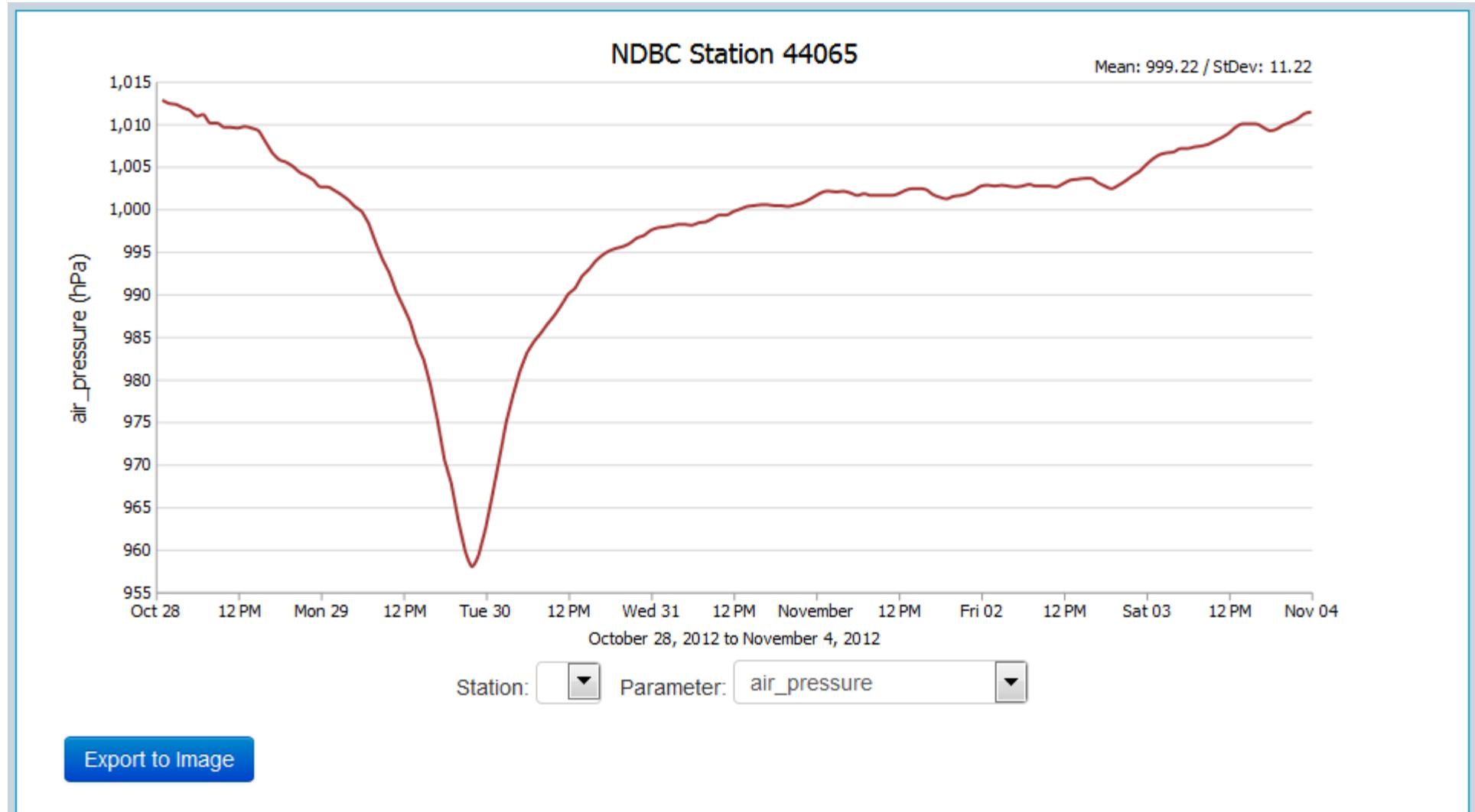


Oregon State  
UNIVERSITY





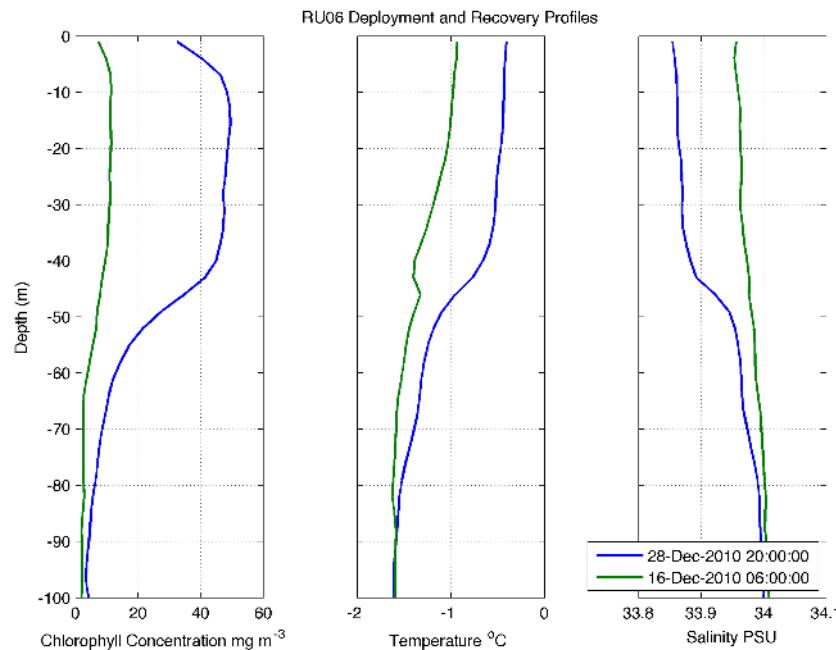
# UX/UI



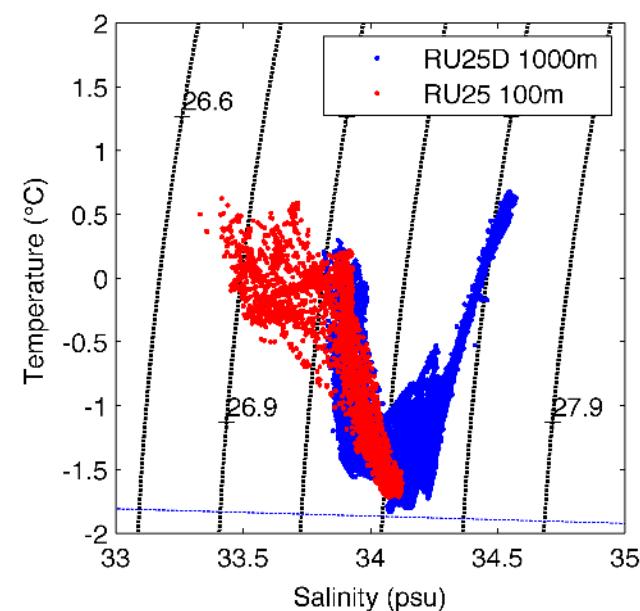
# UX/UI

## X-Y plots

### Depth profiles are critical

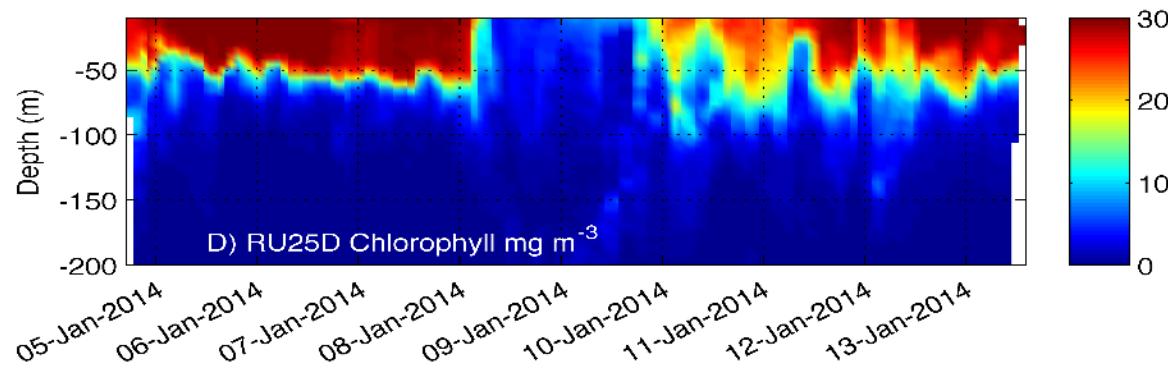


### Temperature & salinity plots



## Examples of what “users” will want to visualize

### X-Y-Z plots



**X-axis could be time, location (lat or long) depending on the question**

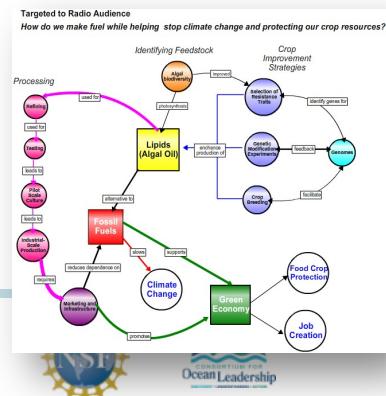


## Expanding the model

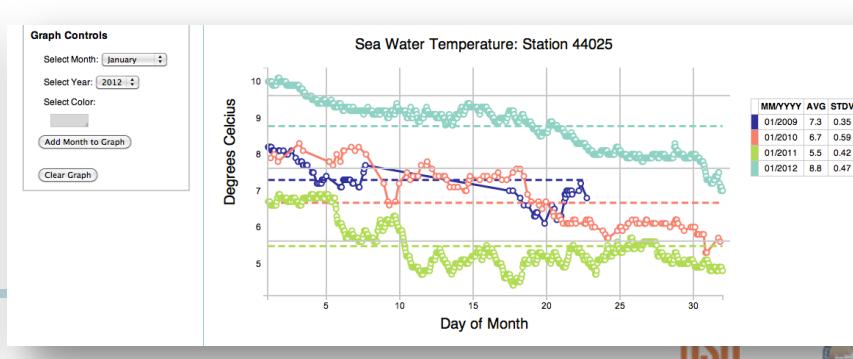
Developing tools to increase the crowd sourcing & educational opportunities with OOI Education and Public Engagement team (EPE)



### Concept Maps



### Data Visualization Tools



### Lab Lesson Builder

Vizualizations ▾ Online Labs ▾ Concept Maps ▾ Media Files ▾ Help

Hurricane Impacts on the Ocean Revised 6/5/13

Introduction Background Challenge Exploration ▾ Explanation

Activity Introduction

Hurricanes are intense weather systems that form in tropical waters. Hurricanes are classified by wind speeds in categories ranging from 1 with wind speeds of 74 mph to 5 with wind speeds in excess of 155 mph. Hurricanes are very powerful storms that can cause widespread damages to communities in their paths. The images on the right show satellite imagery of two hurricanes that struck the United States in 2011. Hurricane Irene in 2011, and Hurricane Sandy in 2012. Hurricane Irene occurred August, while Hurricane Sandy occurred during the month of October. This difference in time of year and the differences and similarities between these two storms, has led some to wonder if there is a relationship between hurricanes and the ocean.

Next >

Rutcher  
Spatial extent of Hurricane Irene, August 27, 2011.

Logos: University of Washington, University of Oregon

# Web access to allow all to explore the ocean

## Ocean Predictive Skill Assessments in the South Atlantic: Crowd-sourcing of Student-Based Discovery

Rachael Sacatelli, Tobias Schofield,  
Katherine Todoroff, Angela Carandang\*,  
Alyson Eng\*, Ian Lowry\*, Harrison  
Mather\*, Antonio Ramos\*\*, Sebastiaan  
Swart\*\*\*, Marcelo Dottori\*\*\*\*, Nilsen  
Strandskov, Josh Kohut, Oscar Schofield  
and Scott Glenn

Rutgers University  
Coastal Ocean Observation Lab  
New Brunswick, NJ, USA

\*United States Naval Academy  
Annapolis, MD, USA

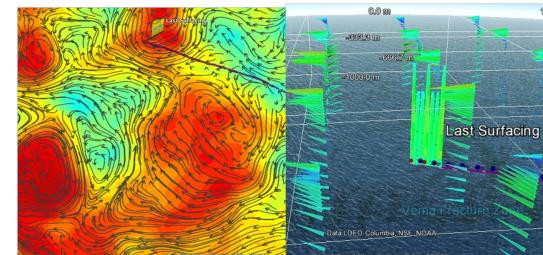
\*\*Universidad de Las Palmas de Gran Canaria  
Las Palmas, Gran Canaria

\*\*\*Council for Scientific and Industrial  
Research, Cape Town, South Africa

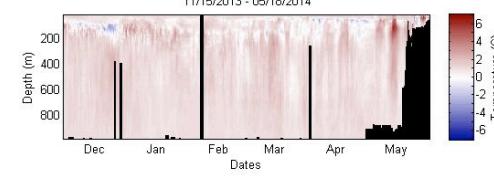
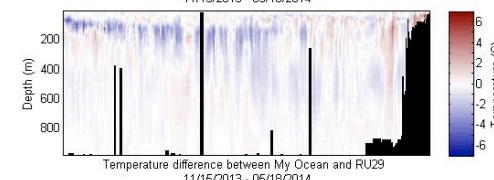
\*\*\*\*Universidade de São Paulo,  
São Paulo, Brazil

MTS manuscript submitted July 14<sup>th</sup> 2014

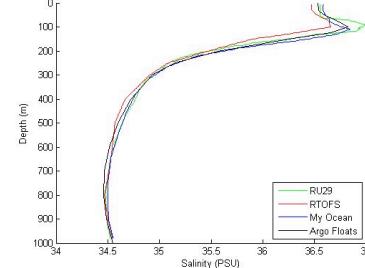
***Student project using OOI EPE  
tools to show the MyOcean global  
model is biased high relative to  
the NOAA RTOFS and real ocean  
using ocean glider and argo.***



Temperature difference between RTOFS and RU29  
11/15/2013 - 05/18/2014

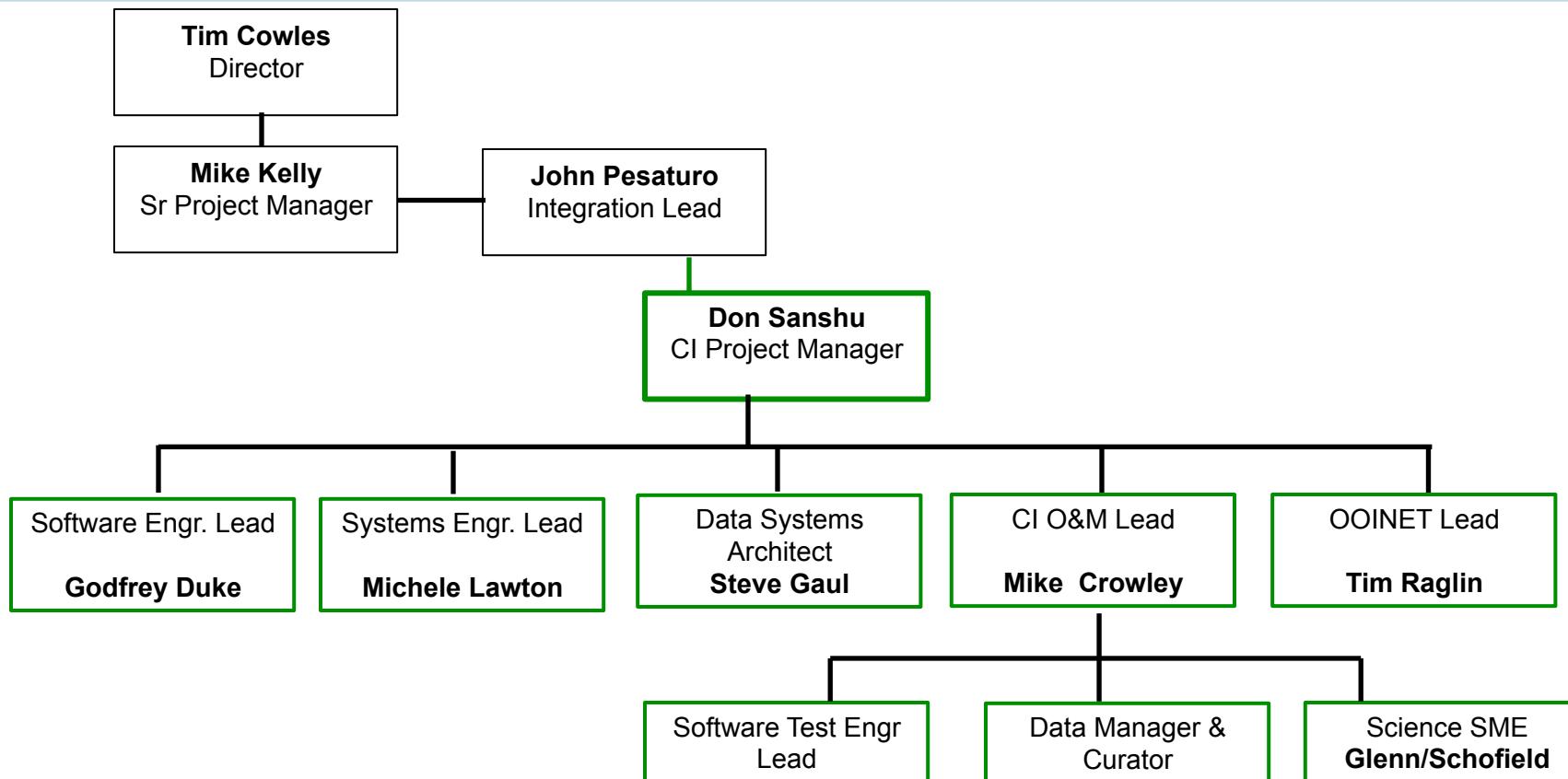


Example Salinity Profile Comparison  
For RU29, RTOFS, My Ocean, and Argo Floats



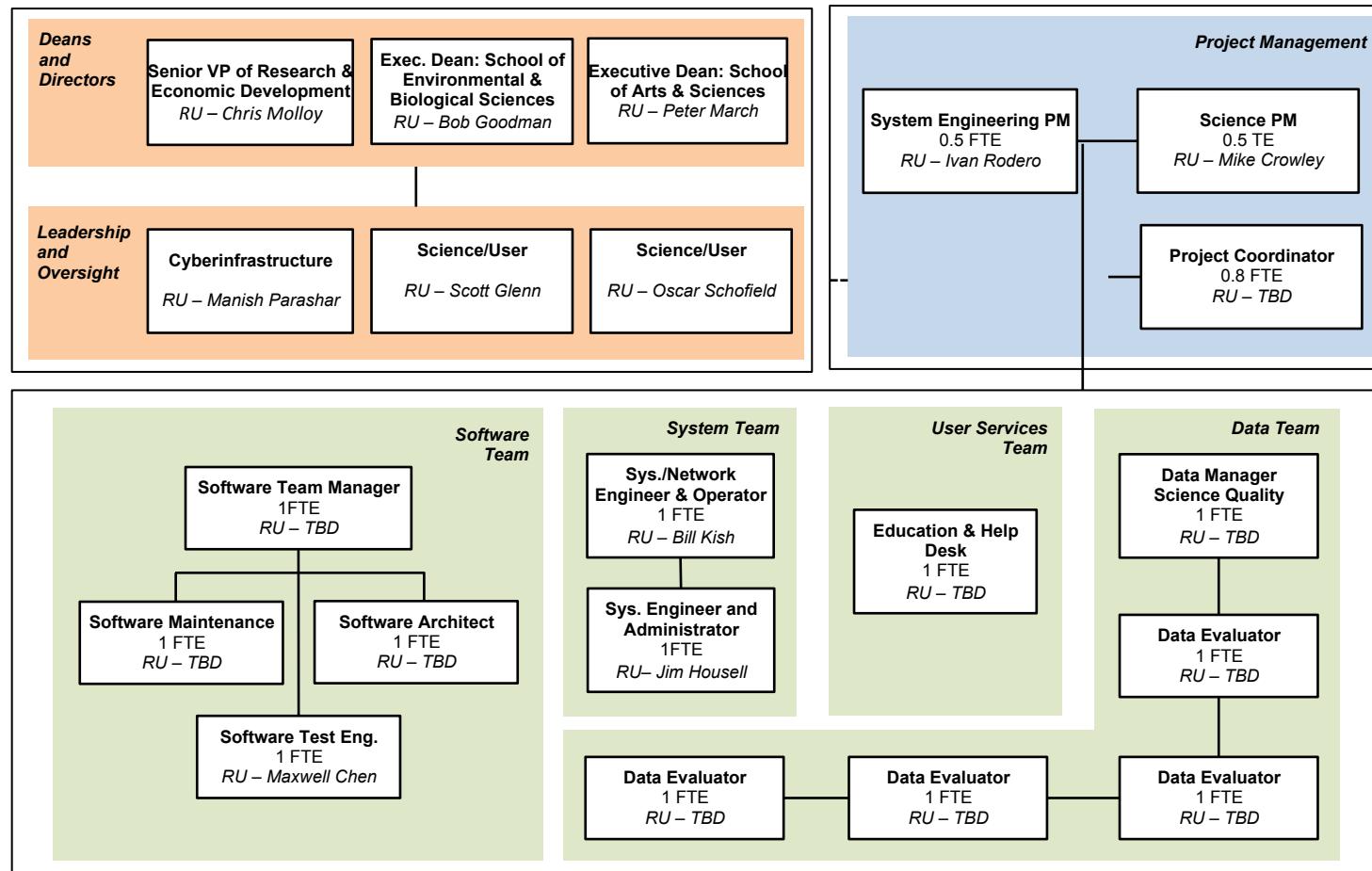


# OOI Net MREFC



# Envisioned Rutgers CI Team

Rutgers  
Support



COL

